

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of dewatering an aqueous suspension comprising treating the suspension with a dewatering amount of a reverse phase polymer,
~~and subjecting the suspension to a mechanical dewatering to form a cake,~~
~~characterised in that in which~~ the reverse phase polymer only partially inverts releasing sufficient polymer to bring about flocculation and thickening of the suspension, involving the release of free water to produce a thickened suspension, wherein the release of free water is achieved by free drainage or filtration,
and the remainder of the polymer is released from the reverse phase polymer as the reverse phase polymer fully inverts in the thickened suspension, and release polymer is mixed into and distributed throughout the thickened suspension and then fully inverts during further dewatering to form a cake,
and the thickened suspension is subjected to mechanical dewatering to form a cake.
2. (original): A process according to claim 1 in which the reverse phase polymer is the sole chemical dewatering treatment aid.
3. (previously presented): A process according to claim 1 in which the aqueous suspension is sewage sludge.
4. (previously presented): A process according to claim 1 in which the mechanical dewatering employs an apparatus selected from the group consisting of belt press, filter press, screw press and centrifuge.
5. (previously presented): A process according to claim 1 in which the reverse phase polymer is a water in oil emulsion or a substantially dehydrated polymer in oil dispersion.
6. (previously presented): A process according to claim 1 in which the polymer is cationic.
7. (previously presented): A process according to claim 1 in which the polymer is formed from at least 30 % by weight cationic monomer or monomers.

8. (previously presented): A process according to claim 1 in which the polymer is selected from the group consisting of cationic polyacrylamides, polymers of dialkyl diallyl ammonium chloride, dialkyl amino alkyl (meth) -acrylates (or salts thereof) and dialkyl amino alkyl (meth)-acrylamides (or salts thereof).

9. (previously presented): A process according to claim 1 in which the polymer has an intrinsic viscosity of at least 0.5 dl/g.

10. (previously presented): A process according to claim 1 in which the polymer is selected from the group consisting of,

i) a polymer formed from 50 to 100% by weight methyl chloride quaternary ammonium salt of dimethyl amino ethyl (meth) acrylate and 0 to 20% by weight acrylamide of intrinsic viscosity between 4 and 10 dl/g,

ii) polyvinyl amidine and polyvinyl amines of intrinsic viscosity greater than 1 dl/g,

iii) quaternised salts of Mannich addition polyacrylamides of intrinsic viscosity greater than 1 dl/g, and

iv) poly dimethyl diallyl ammonium chloride of intrinsic viscosity greater than 0.5 dl/g.

11. (previously presented): A process according to claim 1 in which the polymer has an intrinsic viscosity of at least 4 to 10 dl/g.